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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/627,764	07/28/2003	Michele Bortolotti	240316US0XCONT	4415

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EXAMINER

SELLERS, ROBERT E

ART UNIT	PAPER NUMBER
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1712

DATE MAILED: 04/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Advisory Action Before the Filing of an Appeal Brief	Application No. 10/627,764	Applicant(s) BORTOLOTTI ET AL.	
	Examiner Robert Sellers	Art Unit 1712	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 07 April 2006 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.
 b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
 (a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
 (b) ☐ They raise the issue of new matter (see NOTE below);
 (c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
 (d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
 5. ☐ Applicant's reply has overcome the following rejection(s): _____.
 6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
 7. ☐ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
 The status of the claim(s) is (or will be) as follows:
 Claim(s) allowed: _____.
 Claim(s) objected to: _____.
 Claim(s) rejected: _____.
 Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
 9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
 10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:
See the attachment.
 12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08 or PTO-1449) Paper No(s). _____.
 13. ☐ Other: _____.

Robert Sellers
 Primary Examiner
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1. The closest prior art epoxidized elastomer in European Patent No. 654,3654 is the epoxidized natural rubber "Epoxyprene ENR 50" (page 10, Table 1, Example 5) which contains 50 epoxy groups relative to 100 monomer units according to the definition in column 8, lines 2-4 of Terakawa et al. Patent No. 5,569,690.
2. The closest prior art epoxidized elastomer in Hsieh et al. Patent No. 4,341,672 is the epoxidized butadiene/styrene rubber (col. 5, lines 38-39 and col. 6, Table I, Run 1) having 3.38 grams of oxirane oxygen per 100 grams of epoxidized polymer (footnote (c)).
3. The closest prior art epoxidized elastomer in Terakawa et al. is the epoxidized natural rubber 25 (cols. 7-8, Table 3, Examples 4-15) possessing 25 epoxy groups relative to 100 monomer units and the epoxidized SBR 1502 (col. 16, Table 12, Example 40).
4. Hsieh et al. discloses an epoxidation degree of as low as about 5 percent (col. 4, lines 18-23) embraced by claimed upper limit of 5 percent. Accordingly, the prior art considered in conjunction with Hsieh et al. sets forth the claimed epoxidized elastomer with an epoxidation degree of as low as about 5 percent.

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5. The evidence presented in Tables 1 and 2 on pages 4 and 5 of the declaration filed February 20, 2004 demonstrates a unexpected beneficial combination of wet grip to rolling resistance ratio (i.e. Tan δ 1Hz, 0.1% strain at 0°C to Tan δ 1Hz, 5% strain at 60°C), reduced hardness and abrasion loss for formulations with the claimed maximum of 5% epoxidation (Table 1, A2 and Table 2, M1-A2) over that with 11% epoxidation (Table 1, A4 and Table 2, M1-A4). The claimed minimum of 2.27% epoxidation exhibits benefits in the same properties (Table 1, A6 and Table 2, M1-A6) over an example with 14% epoxidation (Table 1, A7 and Table 2, M1-A7).

6. However, it cannot be ascertained whether the 11% epoxidation of copolymer A4 and the 14% epoxidation of copolymer A7 is representative of the closest prior art epoxidized natural rubber 50 of the European patent, the epoxidized butadiene/styrene rubbers of Hsieh et al. and Terekawa et al., or the epoxidized natural rubber 25 of Terakawa et al. Criticality cannot be based on the use of different units to quantify the epoxidation content of the prior art epoxidized elastomers from that claimed since it cannot be determined whether the exemplified prior art epoxidation degrees fall outside of the claimed range.

7. The epoxidation levels of the elastomers of the references must be converted to the claimed epoxidation degree to ascertain whether the tested values of 11% and 14% epoxidation are accurately representative of the closest prior art. Otherwise, it raises the question of why an order of magnitude higher degrees of epoxidation were tested over the claimed maximum of 5%.

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8. The European patent in Table 1 shows "Precipitated silicic acid, Ultrasil VN3."

It has been conceded on page 4, lines 4-5 of the Remarks section that "the Silica VN3 is VN3 precipitated, which has been thermally treated to become simply silica."

Accordingly, the precipitated silicic acid utilized in the European patent as confirmed by Chemical abstracts registry no. 7631-86-9 (page 4, line 33) and admitted by applicants is silica as claimed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert Sellers whose telephone number is (571) 272-1093. The examiner can normally be reached on Monday to Friday from 9:30 to 6:00. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at (866) 217-9197 (toll-free).



Robert Sellers
Primary Examiner
Art Unit 1712